IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Art Unit: 2419   Examiner: Tsegaye, Saba

In Re: Sundara Murugan
Case: P4524
Serial No.:   10/083,313
Filed: 02/25/2002
Subject: Method and Apparatus for Implementing Automatic Protection Switching
              Functionality in a Distributed Processor Data Router

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Dear Sir:

Response O

In the claims:

All of the claims standing for examination are presented below with appropriate status indication.

1- 35. (Canceled)

36. (Previously presented) A distributed processor packet router, comprising:

a plurality of primary line cards each comprising a plurality of communication ports connected to lines external to the packet router, and each comprising a processor executing software managing operation of the primary line card, including the plurality of communication ports;

a backup line card comprising a backup communication port connected to a line external to the packet router, a communication link to each of the primary line cards, a processor executing software managing operation of the backup line card, including the backup communication port, and a digital memory; and

a control card having a digital communication link to each of the primary and the backup line cards;

wherein the control card communicates state and configuration data regarding the plurality of communication ports to the digital memory at the backup line card, the data including priority ranking for individual ones of the communication ports, and in the event of failure of one of the plurality of communication ports, the processor at the primary line card supporting that communication port instructs the processor at the backup line card to operate the backup communication port using the state and configuration data that is stored in the digital memory for the failed communication port, the processor at the backup line card follows the instruction if the backup port is at that time not in use, and if the backup port is in use, follows the instruction only if the priority of the newly failed communication port is higher ranking than the port for which backup is at that time being performed.

37. (Previously presented) A method for backing up ports in a distributed processor packet router, comprising the steps of:

      (a) communicating, by a control card, state and configuration data regarding primary communication ports implemented on a plurality of primary line cards to a digital memory at a backup line card having at least one backup communication port, the data including priority ranking for individual lines connected to individual ones of the communication ports;

      (b) receiving an instruction at the backup line card to operate the backup communication port according to the state and configuration data associated with one of the primary communication ports;

      (c) following the instruction if the backup communication port is not in use; and

      (d) if the backup communication port is in use, following the instruction only if the line connected to the primary communication port associated with the instruction has a higher priority than the a line connected to the primary communication port for which the backup communication port is in use.

Remarks

The present Response is to the Office Action mailed 07/30/2009. Claims 36 and 37 are presented for examination.

Claim Rejections - 35 USC § 112

2.   Claims 36 and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to describe "...**priority ranking** for individual ones of the communication ports..." Examiner can find no mention of "priority ranking" in the instant specification.

Applicant's response:

Applicant has reviewed the specification and acknowledges that in one embodiment, the lines connected to the ports are prioritized, not the ports themselves. Applicant points out that there is another embodiment in the specification teaching POS interfaces, as follows:

Although it is not specifically illustrated in this example, each physical port on LC 205 and 204 that as connection to SONET network 102 is configured according to a protocol known to the inventor as path-over-SONET (POS). POS is a SONET protocol, and a port configured to run the protocol is termed a POS device by the inventor. Hereinafter in this specification, physical ports adapted for SONET communication may be described as POS interfaces. (pg. 13, lines 14-20)

In the event of availability of services on POS interface 215 on card 204, all of the configuration and state information associated with POS interface A on card 205 is implemented at POS interface location 215. The interface is configured and activated according to the provided information and backup services continue until a reverse

switchover is ordered. In one embodiment, more than one primary may be down and requesting backup services. In this case the POS interface having the higher priority will be backed up. If a higher priority POS interface requests backup services while a lower priority interface is currently being backed up then a reverse switchover may be initiated to free the backup POS interface to service the higher priority line. (pg. 17, 9-19)

Applicant believes that the specification fairly teaches that a POS interface is prioritized. Applicant points out that that although connected lines may be prioritized and said prioritization may even be mirrored to the POS interfaces, the specification clearly teaches that the POS interfaces (ports) are prioritized. Therefore, the 112 rejection should be overcome by the showing.

Allowable Subject Matter

3.   Claims 36 and 37 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Applicant's response:
As argued, above, applicant believes the specification does teach prioritization of ports, as evidenced above in support of the response to the 112 rejection. Therefore, the claims should be allowed in their present form.

Summary

As all of the claims, as argued above, have been shown to be patentable over the art presented by the Examiner, applicant respectfully requests reconsideration and the case be passed quickly to issue.

If any fees are due beyond fees paid with this amendment, authorization is made to deduct those fees from deposit account 50-0534. If any time extension is needed beyond any extension requested with this amendment, such extension is hereby requested.

Respectfully Submitted,
Sundara Murugan

By *[Donald R. Boys]*
Donald R. Boys
Reg. No. 35,074

Central Coast Patent Agency, Inc.
3 Hangar Way, Suite D
Watsonville, CA 95076
831-768-1755